

## North American PHEV Demonstration

### Fleet Summary Report - Hymotion Prius (Kvaser data logger)

Number of vehicles: 43

Reporting Period: 2010

#### All Trips Combined

Overall gasoline fuel economy (mpg)	46
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	55
Total number of trips	40514
Total distance traveled (mi)	344937
Trips in Charge Depleting (CD) mode <sup>3</sup>	
Gasoline fuel economy (mpg)	59
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	135
Number of trips	22644
Percent of trips city / highway	84% / 16%
Distance traveled (mi)	109649
Percent of total distance traveled	32%

#### Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes <sup>5</sup>

Gasoline fuel economy (mpg)	48
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	52
Number of trips	3726
Percent of trips city / highway	49% / 51%
Distance traveled (mi)	77618
Percent of total distance traveled	23%

#### Trips in Charge Sustaining (CS) mode <sup>7</sup>

Gasoline fuel economy (mpg)	39
Number of trips	14144
Percent of trips city / highway	71% / 29%
Distance traveled (mi)	157671
Percent of total distance traveled	46%

Number of trips when the plug-in battery pack was turned off by the vehicle operator <sup>8</sup>	2087
Distance traveled with plug-in battery pack turned off by vehicle operator(mi) <sup>9</sup>	35829

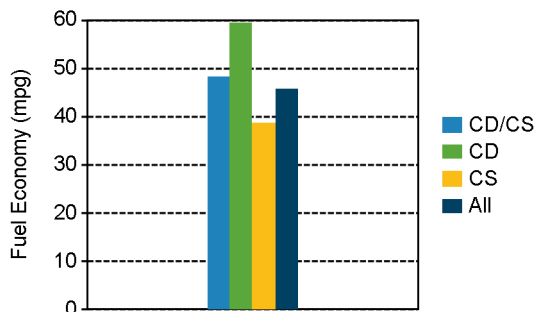
## Vehicle Technologies Program

Date range of data received:

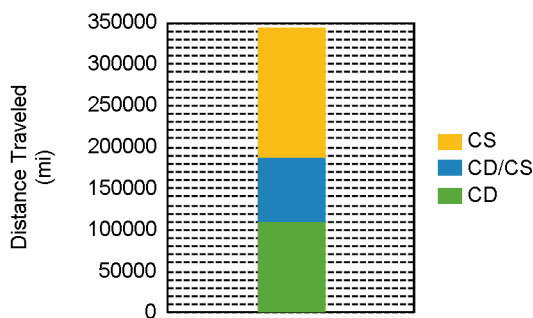
1/1/2008 to 3/31/2010

Number of days the vehicles were driven: 366

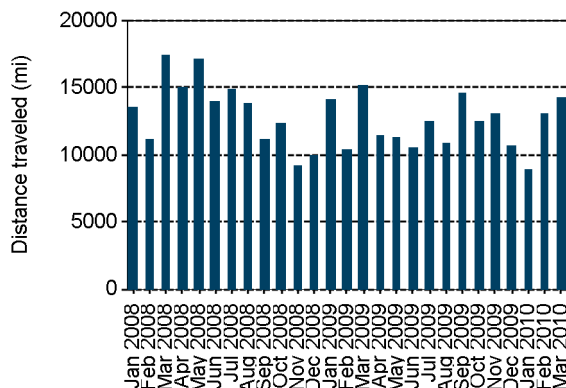
### Gasoline Fuel Economy By Trip Type



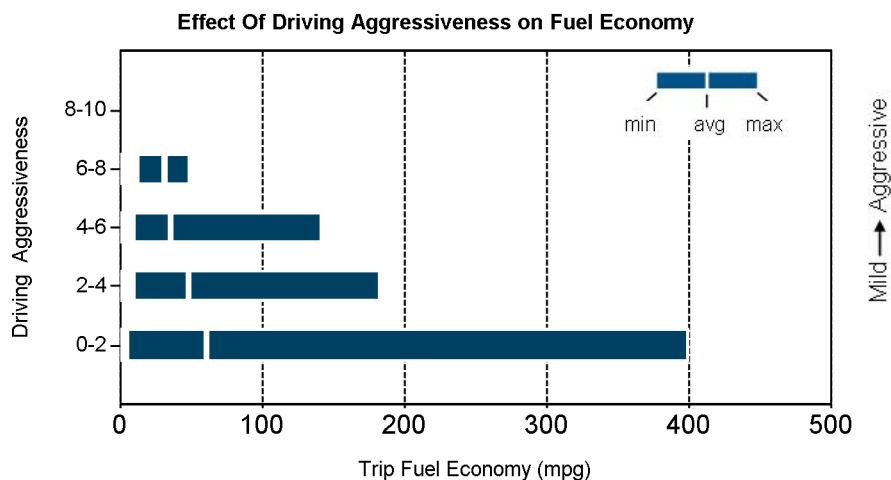
### Distance Traveled By Trip Type



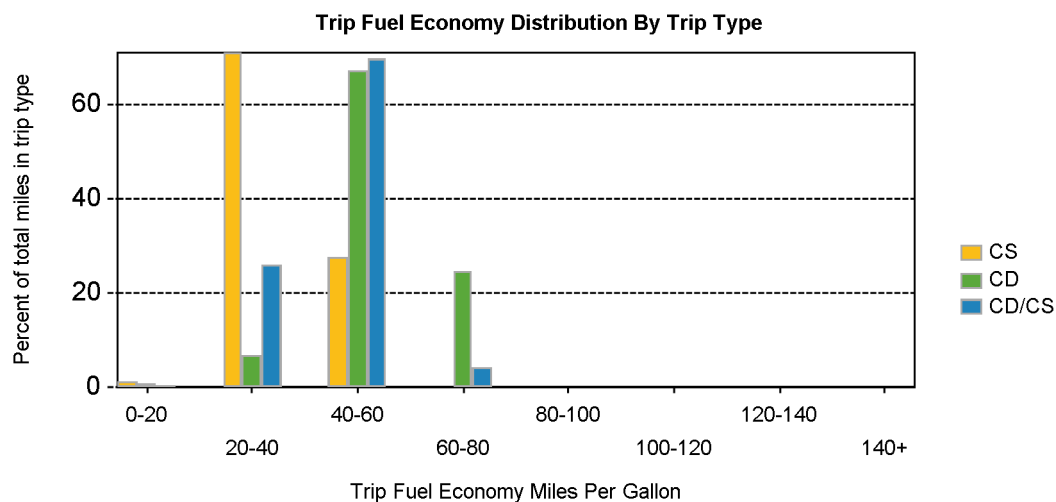
### Miles Logged by Month This Year


Notes: 1 - 9. Please see <http://avt.inel.gov/phev/reportnotes> for an explanation of all PHEV Fleet Testing Report notes.

Trips in Charge Depleting (CD) mode		City	Highway
Gasoline fuel economy (mpg)		56	63
DC electrical energy consumption (DC Wh/mi)	158		109
Percent of miles with internal combustion engine off	33%		10%
Average trip aggressiveness (on scale 0 - 10)	2.0		1.9
Average trip distance (mi)	3.0		14.3
Trips in combined Charge Depleting and Charge Sustaining (CD/CS) modes			
Gasoline fuel economy (mpg)		48	48
DC electrical energy consumption (DC Kw/mi)	79		47
Percent of miles with internal combustion engine off	26%		6%
Average trip aggressiveness (on scale 0 - 10)	2.0		1.6
Average trip distance (mi)	6.3		34.4
Trips in Charge Sustaining (CS) mode			
Gasoline fuel economy (mpg)		33	41
Percent of miles with internal combustion engine off	23%		5%
Average trip aggressiveness (on scale 0 - 10)	1.7		1.4
Average trip distance (mi)	3.4		29.6



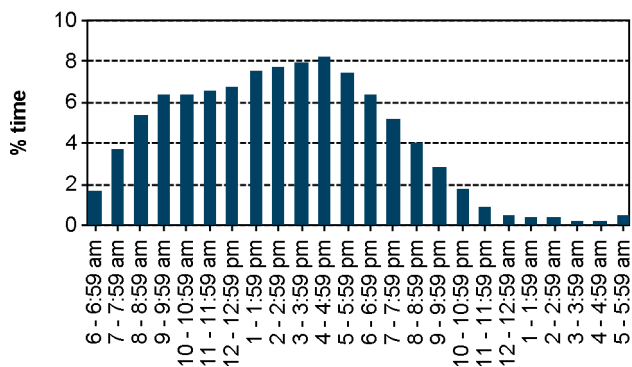
Aggressiveness factor is based on accelerator pedal position. The more time spent during a trip at higher accelerator pedal position, the higher the trip aggressiveness.



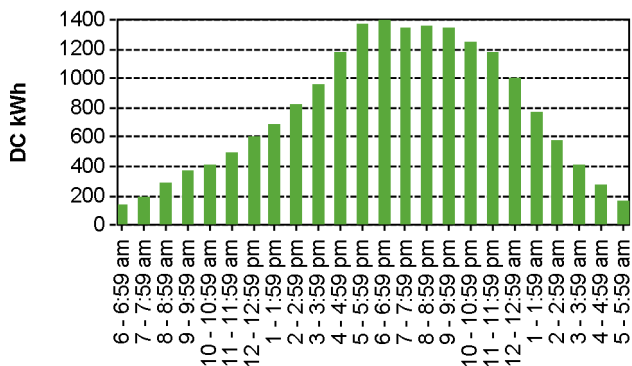
## Plug-in charging

Average number of charging events per vehicle per month when driven	21
Average number of charging events per vehicle per day when vehicle driven	1.5
Average distance driven between charging events (mi)	29.7
Average number of trips between charging events	3.5
Average time charging per charging event (hr)*	2.0
Average energy per charging event (DC kWh)	1.6
Average charging energy per vehicle per month (DC kWh)	32.4
Total number of charging events	11605
Total charging energy (DC kWh)	18055

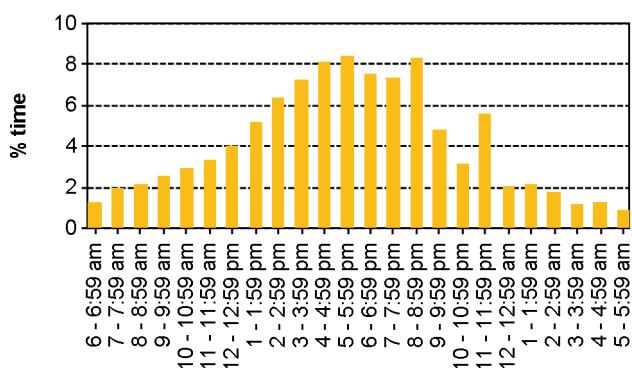
**Time of Day When Driving**



**Time of Day When Charging**



**Time at the Start of Charging Events**



\* Time charging per charging event is the average length of time per charging event when the vehicle was drawing power from the electrical grid. It does not necessarily represent the total duration when the vehicle was plugged in per charging event.